

# NEWSLINE

Published for the employees of Lawrence Livermore National Laboratory

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# ALGAE

and the  
global  
carbon  
cycle

# 2007

## TRANSITION NEWS



# LLNS rolls out final benefits package

Lawrence Livermore National Security, LLC (LLNS) and the University of California kicked off a series of presentations Tuesday further detailing LLNS benefits and the decisions employees will need to make about their UC benefits as part of the transition to the new contractor.

Sharon Lyon of LLNS presented the elements of the LLNS benefits package and explained similarities with and differences from current UC benefits. Judy Ackerhalt of UC provided guidance on the options and decisions employees will have to make to transfer UC benefits to LLNS.

Ralph Howard of the Lab's Benefits Office facilitated the presentation in the Bldg. 123 auditorium and the audio-linked auxiliary auditoriums in Bldgs. 543, 482, 453 and 155.

Lynn Soderstrom of LLNS and Ackerhalt fielded questions from employees in all auditoriums following the presentations.

The depth and breadth of the presentation make it impractical to cover in Newsline. Employees are encouraged to consult the slides and the employee option matrix from the presentation, which are available from NewsOnLine (MY LLNL Front Page) and the LLNS Website, [www.llnslc.com](http://www.llnslc.com). The

presentation also will be rebroadcast daily through Aug. 12 on Lab TV channel 2 at 10 a.m., noon, 2, 4 and 8 p.m. and 4 a.m.

A presentation for employees and their family members will be held Tuesday, Aug. 7, from 6:30-8:30 p.m., at the Shrine Event Center in Livermore, 170 Lindbergh Ave., just off Airway Blvd. and Interstate 580.

In addition, meetings specifically for retirees are scheduled for Aug. 7, from 10 a.m.-noon and on Aug. 8, from 9-11 a.m., at the La Quinta Inn, 7770 Southfront Road in Livermore and on Tuesday, Aug. 14, from 9-11 a.m., and Wednesday, Aug. 15, from 6:30-8:30 p.m., at the Shrine Event Center.

Benefits information is available on the LLNS Website. Employees also may ask questions via the Website or by calling the LLNS hotline at 4-LLNS (5567).

The UC Customer Service Center at 1-800-888-8267 or the LLNL Benefits hotline at 2-9955 is available for questions on UC benefits.

### LLNS-UC PRESENTATIONS FOR EMPLOYEES

Date	Time	Place
Tuesday, Aug. 7	6:30 - 8:30 p.m.	Shrine Event Center 170 Lindbergh Ave. Livermore, CA

### LLNS-UC PRESENTATIONS FOR RETIREES

Date	Time	Place
Tuesday, Aug. 7	10 a.m. - 12 p.m.	La Quinta Inn 7700 Southfront Road Livermore, CA
Wednesday, Aug. 8	9 - 11 a.m.	La Quinta Inn 7700 Southfront Road Livermore, CA
Tuesday, Aug. 14	9 - 11 a.m.	Shrine Event Center 170 Lindbergh Ave. Livermore, CA
Wednesday, Aug. 15	6:30 - 8:30 p.m.	Shrine Event Center 170 Lindbergh Ave. Livermore, CA

### Facility walkdowns

LLNS is conducting a series of "walkdowns" of many facilities on the Lab's main site, Site 300 and the Nevada Test Site.

The walkdowns and reviews of the Lab's buildings are part of the second phase of the LLNS transition process. These are an assessment of the conditions of buildings and facilities and other infrastructure.

The process will run through Aug. 21. There are six teams comprised of specially trained LLNS and LLNL ES&H and security subject matter experts.

The goal is to conduct walkdowns of 100 percent of the buildings ranked higher than office category and a number of office facilities. Facility Points of Contact (FPOC) or other facility reps will accompany the teams. In addition, the daily schedules will be coordinated with the FPOCs and line management to accommodate ongoing programmatic work.

Employees are asked to stop facility entry or stop a walkdown in progress if they observe unsafe, unsecure or non-compliant activities or conditions. For a complete summary of facility walkdowns, see next week's *Newsline*.

### Have you received your LLNS job offer letter yet?

If not, call the LLNS hotline, 4-LLNS (5567).



Clockwise from top: Judy Ackerhalt of UC, Ralph Howard of the Lab's Benefits Office and Sharon Lyon of LLNS.

# Biweekly payroll changes



PHOTO BY JACQUELINE MCBRIDE

LLNL Transition Manager Barbara Peterson briefs Lab administrative staff on the implementation of the new biweekly payroll schedule that will take effect Oct. 1.

Effective Oct. 1, LLNL will implement a new biweekly payroll schedule for exempt employees (currently monthly paid employees). The change in schedule is a direct result of California Labor Law. As a private entity, Lawrence Livermore National Security, LLC (LLNS) must comply with all state codes and regulations. LLNL’s current practice is to pay exempt employees on the first day of the month for their work during the past month. Non-exempt employees at the Laboratory are already on a biweekly payroll schedule.

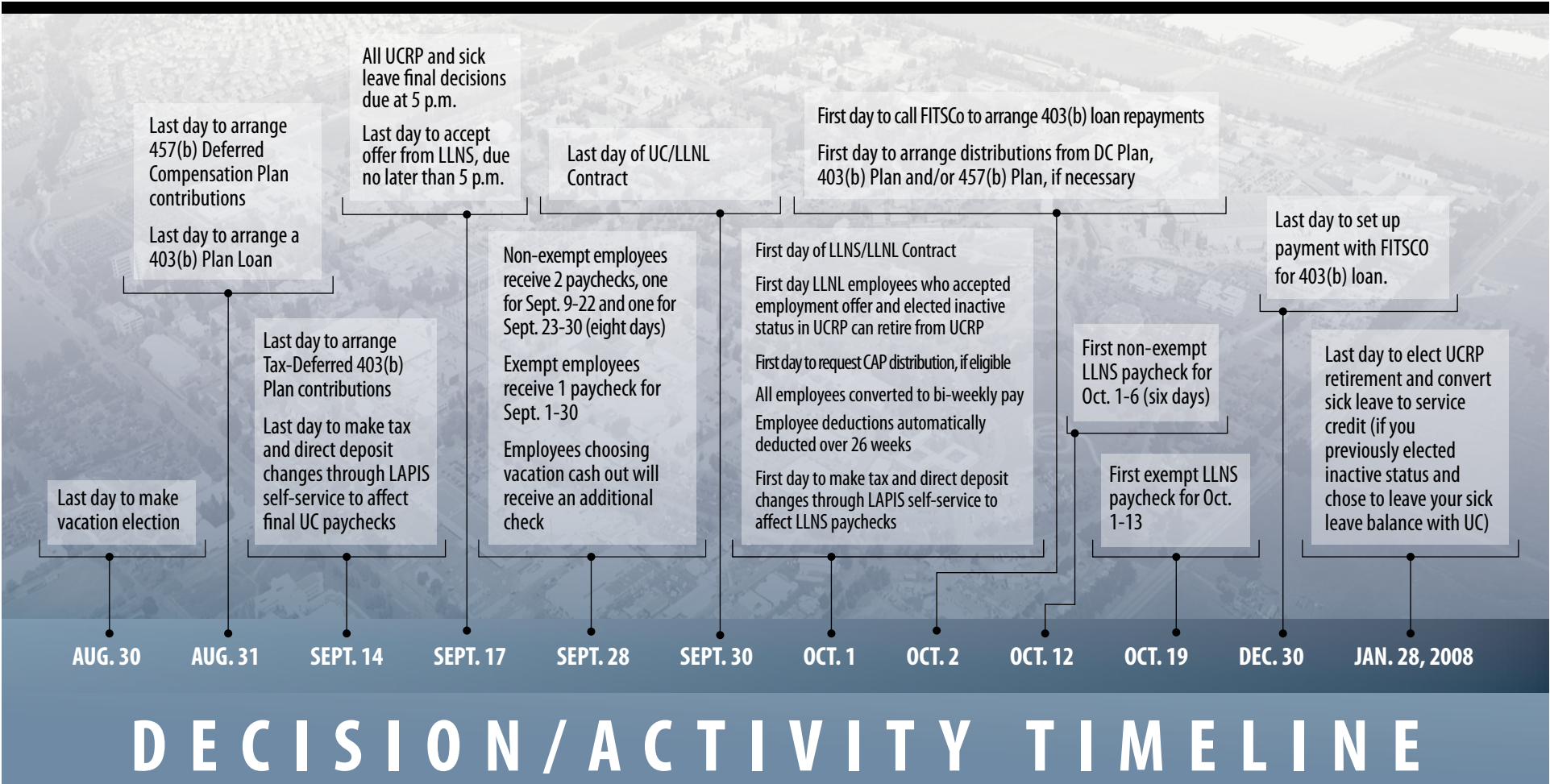
The Laboratory’s Payroll Office is offering tools, briefings and a planning checklist to help prepare for this change.

It should be noted that exempt status will not be affected by this change. Employees will continue to log their time and report as they do now. But the change will mean that employees are paid differently, receiving a portion of their income earlier than before. This will result in 26 paychecks per year and in this first year of implementation; exempt employees will receive approximately three weeks of income by the end of December 2007 that would have otherwise been paid in January 2008. Since this is unplanned income in the 2007 tax year, employees should plan for tax consequences accordingly.

For more information, go to the Web at <http://transition.llnl.gov/home/?url=payrollTimeline&id=95>.

EXEMPT EMPLOYEES PAID BIWEEKLY	
October - December 2007 Exempt Employees Pay Schedule	
Period Ending	Pay Date
Oct. 1 – 13	Oct. 19
Oct. 14 – 27	Nov. 2
Oct. 28 – Nov. 10	Nov. 16
Nov. 11 – 24	Nov. 30
Nov. 25 – Dec. 8	Dec. 14
Dec. 9 – 22	Dec. 28

NON-EXEMPT EMPLOYEES PAID BIWEEKLY	
October - December 2007 Non-Exempt Employees Pay Schedule	
Period Ending	Pay Date
Oct. 1 – 6	Oct. 12
Oct. 7 – 20	Oct. 26
Oct. 21 – Nov. 3	Nov. 9
Nov. 4 – 17	Nov. 21
Nov. 18 – Dec. 1	Dec. 7
Dec. 2 – 15	Dec. 21



## SCIENCE NEWS

# Algae's role in carbon cycle up close

By Anne M. Stark  
Newsline staff writer

**B**lue green algae are significant species in the global carbon cycle because they transform nitrogen gas from the atmosphere into a useable nutrient, enabling photosynthesis in nutrient-poor waters.

Using NanoSIMS (high-resolution secondary ion mass spectrometer), Laboratory, USC and Portland State University scientists showed that they could image and track nutrient uptake in blue green algae at the nanoscale. The new method should help to clear up the age-old puzzle of how different species of blue green algae can “fix” or take up atmospheric nitrogen and carbon in a single cell organism. Carbon fixation during photosynthesis produces oxygen, which inhibits nitrogen fixation.

Different species of blue green algae solve the problem in different ways and scientists still don't understand how some of the most important species can get both of these jobs done.

To develop the new method, the researchers studied the freshwater algae, *Anabaena oscillarioides*, which separates the two processes into adjacent cells that share the products. LLNL researchers Peter Weber, Jennifer Pett-Ridge, Stewart Fallon and Ian Hutcheon used NanoSIMS to track the uptake and movement of carbon and nitrogen inside two types of cells in the algae: vegetative cells, which perform carbon fixation, and heterocysts, thick-walled relatives that pull in nitrogen.

NanoSIMS provides the ability to map distributions of elements and isotopes with 50-100-nanometer resolution. The device allowed the scientists to measure the carbon and nitrogen uptake and subsequent distribution at the cellular and subcellular level.

“The method shows the dynamics of resource uptake and redistribution down to the level of sub-micron nitrogen storage and cell wall formation during cell division,” Weber said.

The researchers used stable isotope tracers in nitrogen and carbon dioxide gases to track nitrogen and carbon fixation. After a few hours of incubation, vegetative cells exhibited a large enrichment in carbon and nitrogen isotopes because of active carbon and nitrogen uptake and intercellular exchange. During photosynthesis, most of the newly fixed carbon was allocated to vegetative cells because they are rapidly dividing, while heterocysts require very little carbon because they are non-growing cells.

The NanoSIMS images showed that mature heterocysts are distinguishable from the vegetative cells based on their size, shape and intercellular distance. The method also showed that newly fixed nitrogen levels are higher in vegetative cells than in mature heterocysts.

“We were able to see on a cell-by-cell basis how newly fixed nitrogen is rapidly exported from the heterocysts to vegetative cells, keeping pace with the nitrogen demands of the growing and dividing vegetative cells,” Weber said. “Now we can take these results and apply them to poorly understood species.”

USC's Kenneth Nealson predicts that NanoSIMS opens up a whole new field of study.

“You can use this technology to look at things going on inside the cell,” he said. “This is going to change the way that we do a lot of microbiology.”

The research appears in the latest issue of *The International Society for Microbial Ecology (ISME) Journal*.

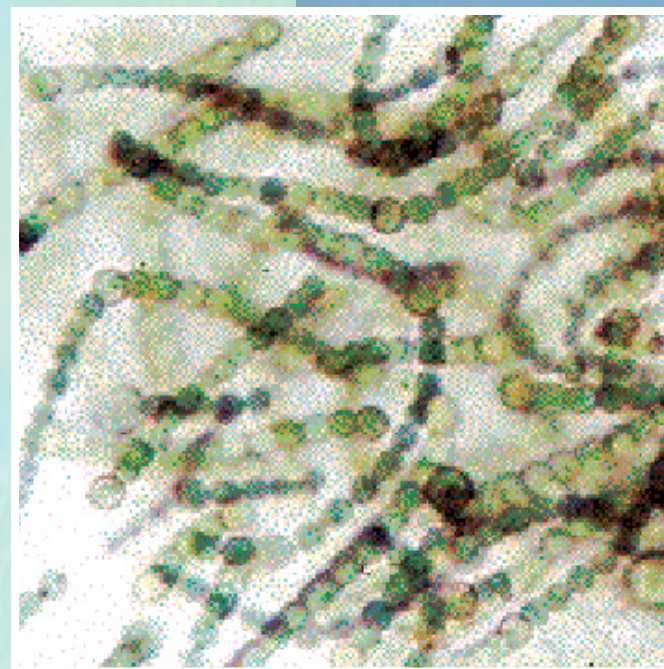


IMAGE COURTESY OF NASA

**Cyanobacteria** (blue green algae) live in the water, and can manufacture their own food. Because they are bacteria, they are quite small and usually unicellular, though they often grow in colonies large enough to see. They are one of the largest and most important groups of bacteria on earth.

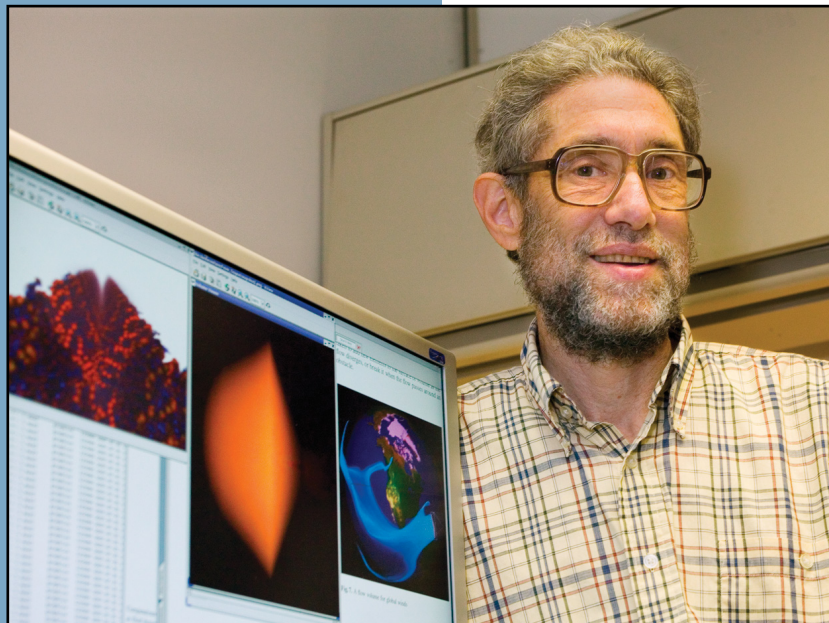


IMAGE COURTESY OF NASA

On the cover: The Baltic Sea blooms with life two times per year, once in the spring and once in the late summer. This true-color Aqua MODIS image shows the deep green swirls of the summer bloom around the Swedish island of Gotland. The summer bloom is usually caused by blue-green algae growing on the surface of the water. The algae thrive when ocean waters are warm and winds are calm; strong winds would churn the ocean, stirring the plants down into the water's depths and keeping them away from the sunlight that they need to reproduce.

## NOTABLE ACHIEVEMENTS

# Taking scientific visualization to the 'Max'



JACQUELINE MCBRIDE/NEWSLINE

**Nelson Max of Computation will receive the Steven A. Coons Award for Outstanding Creative Contributions to Computer Graphics.**

Nelson Max of Computation will receive the Steven A. Coons Award for Outstanding Creative Contributions to Computer Graphics at SIGGRAPH 2007 in San Diego on Monday.

This award, considered the highest award in the field of graphic, is given in odd-numbered years to an individual to honor that person's lifetime contribution to computer graphics and interactive techniques. The award is presented to Max in recognition of his work in pioneering scientific visualization, his deep technical contributions, and the important role he has played in stimulating ideas and intellectual exchange in computer graphics.

Max has a joint appointment with UC Davis and the Laboratory. His research interests include: realism in nature images; molecular graphics; computer animation; and 3D scientific visualization. He served as computer graphics director for the Fujitsu pavilions

at Expo 85 and 90 in Japan. Max received his doctorate in mathematics from Harvard University in 1967 and is a member of Association for Computing Machinery Siggraph.

Previous recipients of this award include familiar names from film and television. Edwin Catmull worked at Lucasfilm and Pixar. He was a key developer of the RenderMan rendering system used in films such as "Toy Story" and "Finding Nemo." Jim Blinn devised new methods to represent how objects and light interact in a three dimensional virtual world, like environment mapping and bump mapping. He is well known for creating animation for two television series: "Carl Sagan's Cosmos: A Personal Voyage," and the pioneering instructional graphics in "The Mechanical Universe." His simulations of the Voyager spacecraft visiting Jupiter and Saturn have been

# Greg Simonson honored for anti-terrorism work



CAPT. ADRIANNE KETELSEN

**LLNL's Greg Simonson was presented the U.S. Air Force award for "Exemplary Civilian Service" by Air Force Maj. Gen. Robert Smolen.**

*By Stephen Wampler  
Newsline staff writer*

Lab employee Greg Simonson has been honored with a U.S. Air Force medal for his efforts to help protect the nation's capital and surrounding region from terrorist attacks.

In a mid-June ceremony held at the Andrews Air Force Base Command Center, Simonson was presented the Air Force award for "Exemplary Civilian Service" by Air Force Maj. Gen. Robert Smolen.

The award, consisting of a medal and a certificate, is usually given to civilian employees of the Department of Defense and rarely granted to non-DoD workers.

Simonson has worked on assignment in Washington D.C. since November 2006, serving as the senior scientist for the Counter-Chemical, Biological, Radiological, Nuclear and High Yield Explosives (CBRNE) center for the Air Force District of Washington.

In his award citation, Simonson was recognized for his "distinguished performance." The citation also noted that, "His efforts led to solutions that improve organic Counter-CBRNE response capabilities for the national capital region."

As chief scientist for the Counter CBRNE center, Simonson has worked

with various governmental agencies, such as the Department of Homeland Security, the Department of Energy, and the Defense Threat Reduction Agency (DTRA), to move forward the best science and technology to help defend the nation's capital region against terrorist attacks.

Those efforts included bringing about the usage of a DHS and LLNL tool called the National Science and Technology Threat Awareness and Reachback, or NSTTAR. This capability consists of a group of subject matter experts and tools that tap resources at the Laboratory, other national labs and research centers to analyze threats and capabilities.

A DTRA tool was also used by the Air Force District of Washington to assess the possible terrorist attack threats to Andrews Air Force Base.

The Air Force District of Washington is one of the agencies responsible for security in the national capital region, which consists of the District of Columbia and seven surrounding counties in Maryland and Virginia.

Prior to his Washington, D.C. assignment, Simonson headed the Lab's Q Division (Proliferation, Detection and Defense Systems) from 2000 to 2006, within what is now the Nonproliferation, Homeland and International Security Directorate.

i.want ads

Due to the high quantity of ads and space limitations, these want ads have been abbreviated. For the complete ad listings, refer to the internal Website: <http://www-r.llnl.gov/pao/news/ wantads.html> or for the latest pdf download and retiree information, see the external Website: <http://www.llnl.gov/pao/employee/>. Please note that these ads appear on the Web.  
**Date of ads: Approx. July 24 to July 31. Ads appear on the Web for seven days.**

**AUTOMOBILES**

Ford F250 superduty, supercab, Lariat shortbed. \$18,000. 19K miles, white w/gold trim. 707-647-1636

1992 GMC Vandura, customized van. \$2,800. <74K original miles, custom interior, 925-980-0120

1995 Infiniti G20. \$2,600 OBO. 151,000 miles, power windows and locks, 925-215-1744

1995 Grand Cherokee Laredo jeep. \$3,800 OBO. Original owner. 2WD, 6 cyl 925-765-4404 or 925-679-2432

1996 Chrysler Concord. \$3,900. V6, 3.5L engine, power windows/doors, 510-537-0374 or 510-329-1513

1999 Nissan Maxima. \$5,900. 126K, white, all power, good condition. 209-836-5652

2000 Hyundai Elantra GLS Sedan 4D. \$2,500 obo. Excellent commute car. Must sell fast. 209-471-7237

2003 Chevy Malibu. \$7500. White w/ grey cloth interior. PS,PB,PW,PL, keyless entry, alarm, 925-373-0483

2005 Dodge Durango. \$16,000. V8 3rd Seat 38,000 miles original owner excellent condition 925-240-9992

2005 GMC Yukon. \$24,000. Original Owner, 2wd, 27k miles, excellent condition. 925-518-0402

2005 Honda Accord LX. \$13,500 OBO. Mint condition, Great commuter car. 925-584-1612

2005 Mazda. \$16,500 obo. Great commuter car, excellent gas mileage, 925-234-5843

2005 Toyota Camry. \$12,500. LE, 4 Cylinder, Power driver seat, CD player, excelent condition. (209) 968-5784

2006 Ford Mustang GT Coupe Premium. \$23,000 OBO. 23,000 miles. 925-200-9204

2003 Buick Century 4 door sedan. \$7,500. Maroon, excellent condition, one owner, 925 625-4291

Chevy Corvette Convertible. \$28,250. 2000 Red Convertible Corvette, soft black top. 209-845-9077

Honda Accord EX 1999. \$6,500 OBO. 155K miles 925-337-2810

Rims. \$250. American Racing 16" 5 lug pattern. Excellent condition. 925-292-8810

Toyota Camry 1992. \$4,000. 4-door, 190,000 miles. In excellent condition and very reliable. 415-794-5247

VW Jetta 1.8T.\$12,000 OBO. Absolutely spotless 2002 Under full VW warranty 510-652-1994

**BOATS**

18' Seaswirl with extras. \$4,000. Selling our loved boat and throwing in a bunch of great stuff. 209-499-6607

2003 20ft Glastron Ski/Fish Boat.\$19,500. 925-294-8188

**ELECTRONIC EQUIPMENT**

Color HP inkjet 720i printer. \$40. Works perfect. 925-980-9336

Computer parts. best offer. See ad on Web for details. 925-245-9857

Hitachi 51in. HDTV-ready television. \$700. Model: 51G500; 925-570-3481

Oak stereo cabinet. \$150. Oak stereo cabinet with glass enclosure and two drawers. 209-952-0069

PC Computer. \$150. AMC Tahlon xp 2000+, elitegroup ecs k7s5a pro motherboard, 925-245-9857

Projection screen. \$200. Projection screen Draper Silhouette, 80" x 60", 925-935-5004

Sony Psyclone Nodus sound experience, playstation portable, new. \$60. 925-648-0671

Starband 360 satellite internet system. \$30. 925-449-5116

**GIVEAWAY**

Boxes & packing materials. Free boxes & packing materials available for free. 925 519-1881

Entertainment center. 5 1/2' x 4'x 1 1/2' deep,4 shelves for components w/glass door. 925-449-5116

Free fishtanks. 50 gallon fishtank and supplies. Two fish included. Leave message. 925-443-4198

Pet pass-through door Free. Exterior grade door configured with a pet pass through 925-245-9509

**HOUSEHOLD**

Adult walker. - Tuffcare Model W200 \$25 Never used. 925-337-2322

Beautiful solid wood ladder shelves. \$145. 925-640-5469

Bedroom Furniture. \$250 OBO. Solid wood, full size captain's bed. 8 drawers, 209-627-6408

Bunk Beds & Trundle. \$375. Solid light maple bunk beds by Stanley (Young America- Tranquility). 925 519-1881

Bunkbed / desk / loft. \$650. Gorgeous, like new, 209-845-0699

Computer Desk. \$90 OBO. oak, 60 x 25.5", w/three drawers. 925-447-7082

Conair clothes steamer. \$45. Hardly used 925-443-0126

Couch. \$350. Beautiful,tufted, 7'x 3' southwestern pattern of browns. Exc. condition. 925-449-5116

Curio cabinet. \$350. Dark oak, glass door with 5 glass shelves,light inside, exc.condition. 925-449-5116.

Hoover Ultra steam carpet Cleaner. \$45 OBO. Gently used. 925-443-0126

Mirror. \$30/BO. 24in by 36 in mirror with gold frame. 925-447-2905

Noritake China. \$250. Shenandoah is a softly decorated rose motif in gentle shades of pink, 916-803-2560

Oak computer desk. \$75. Small w/ hutch and 2-drawer file cabinet. 209-830-8285

Orthopedic Adjust-A-Sleep Power Adjustable Bed. \$350. 925-337-2322

Playskool Peek N Play Discovery Mat. \$15. 925-648-0671

Recliner. \$125. Lazy Boy, rocks, swivels,scotch guard,sky blue. Great condition, 925-449-5116

Solid Oak Bedroom Set. \$495.

Twin size includes trundle bed with two mattresses, armoire, bookcase headboard. 925-243-9123

Sony Nodus. \$60. Playstation portable, adjustable charging dock charges PSP system. 925-648-0671

Stereo cabinet/TV stand. \$100 OBO. Custom cherry stereo cabinet/TV stand with shelving 925-846-8394

Table & chairs. \$200. 60"x 35" honey pine w/4chairs with wood arms, casters, 925-449-5116

Table w/chairs. \$150. Dark wood with pedestal base,round, 925-449-5116

Ultra Power wheelchair. \$600. Pride Jazzy 1103. Two years old with power chair seat lift. 925-337-2322

Washer and dryer. \$165 bo. (925) 960-9517

Wheelchair. Pride Mobility Stylus. \$200 With cushion. 925-337-2322

**MISCELLANEOUS**

Pure Medspa Gift Certificate. \$25. Good for any spa services. 925-648-0671

Wheels. \$225. Set of new wheels size 13 fits Honda civic 93 94 or maybe Toyota. 209-531-1527

Baby Bjorn. \$35. carrier; silver/gray; used only a few times. 925-413-2595

Baby Sac. \$10. baby bag; like new; brown with pink stitching. 925-413-2595

Chrome chevy wheels. \$150. Stock Chevy wheels and tires off 03 suburban 925-373-3429

Disney Princess Lamp. \$25. Beautiful nightlight and lamp. 925-487-8506

Disney Winnie Pooh gardening & wheelbarrow set. - \$30. 925-648-0671

Dolls. \$25 Porcelain, in Irish dress, not for playing with. 925-449-5116

Entry door, 2 matching double pane windows, bathroom mirror. \$50 each. 510-638-1836

File drawers. \$35. Two-drawer metal and glass rolling drawers with seat cushion top, 925-640-5469

Fisher-Price Baby Swing. \$10. Good condition; some stains. 925-413-2595

Fishing rods and reels, prices vary. 10 inch table saw - like new, \$65. Black & Decker workmate. Other tools. 925-47-47-1009

Fuel tank, BO. Fuel tank unit;best offer /reasonable 925-735-6002

Garage Sale. Huge garage sale. Satarday, Aug. 5, 2007 Eilene Dr. Pleasanton. 925-487-8506

Maternity clothes. \$50. Bag of maternity clothes; ~25 items 925-413-2595

Monterey Bay Aquarium tickets. \$42. 2 Monterey Bay Aquarium Tickets. Good until April 30, 2008. 925 455-1578

Shop tools. \$40/offer. Sears Craftsman benchtop, portable planer for wood working. Works fine. 925-245-9509

Tire. \$145 OBO. new tire 205/75/15 w/rim,new 925-735-6002

Tuffy overhead radio console for Jeep.

\$100. Overhead dual bay cb radio 209-823-5845

Weslo G-30 Treadmill. \$100. The treadmill was bought for my mother who used it 10 times. 925/373-1210

**MOTORCYCLES**

1997 Honda CBR900RR. \$4,000. Erion racing colors-flourescent red and black - 925-518-4885

2003 Polaris 400 ATV. \$3,000. Predator white 2004 plastics with blue powdercoated frame 209-825-6311

2004 Yamaha R6. Limited edition. \$7,000. Silver w/black flames, 1477 miles, 925-784-6053

2006 Yamaha Virago. \$3,000. 250CC, black, 200 miles 925-550-3809

Ironhead Harley Project. \$1,400. 1971 Ironhead Sportster. 925-216-5685

**MUSICAL INSTRUMENTS**

Guitar. \$150. Steel string guitar. Like new, extra strings, hard carrying case. Must see. 209-832-5462

Piano. \$450. Weber New York, up right, good condition, ivory keys, great sound. 925-447-3912

Roland XV-5080 midi sound module. \$850. 925-449-4116 or 925-337-4016

**PETS**

Bark collar - lemon spray. \$20. PetSafe bark collar with 2 cans of lemon spray. 455-5672

Electronic pet fence. \$169. Never used, Innotek preimum rechargeable 925-785-4680

Parrot cage. \$50. Parrot cage 20x20x29 inches. Bars are 1.25" apart. (925) 423-8377

Senegal parrot. \$400 OBO. Named "Kelly". She's cute, & comes w/ cage(s), tree, misc. - 925-373-0314

**RECREATION EQUIPMENT**

BOWFLEX revolution. \$2,300. 1 year old, excellent condition barely used. 925-337-3633

Fishing rods. \$75 each. Fishing rods/ reels, shakespeare/ugly-stik tiger, model BWC2201/7ft, 925-447-1009

Nordic Track. \$30. Medalist exercise ski machine. Very good condition. 925-829-3226

Pool table. \$300. Bar-room style with ball return. 925-373-3429

Treadmill. \$150. Weslo, brand new, space saver. 925-449-5116

Women's golf clubs. \$60. The set has not been used much and is in good condition. 925-846-8394

**RIDESHARING**

Solano County Van Pool. Forming for September 2007. 4-5589 925-424-5589

**SHARED HOUSING**

Rm. for rent. \$1,100. Private B&B. All priv/utl included garage parking pool/ spa 925-321-0753

Room for rent. \$600. Furnished, in Livermore. Close to Lab. Non-smoker, Female preferred. 925 443-3653

Room for rent in Livermore. \$650. 1 room avail w/private full B/A. Female

preferred. 925-784-3184

**TRAILERS**

12ft Tandem axle Trailer. \$3,400 OBO. Enclosed 6 ft. by 12 ft with brakes, interior lighting, 925-373-6641

28 FT. Komfort Fifth Wheel, \$2,500 AC, elec jacks, no pets, no smoking, good condition, (510)537-1871 925-833-6076

Tent trailer. \$2,000, 1992 Sequoia by Fleetwood/Coleman. Sleeps 5-6. Kitchen, heater, (925) 960-9517

Would the gentleman who bought the oak sided, steel frame jeep trailer in November call me. 209-823-5845

Travel Trailer. \$8,750. 2002 Fleetwood Coleman/Caravan C-23, Fully Self Contained, 925-308-7025

**TRUCKS**

1993 Chevy S-10 pickup w/camper shell. \$3,000. 120k miles, dealer maintained, 925-846-1525

1995 Dodge 1500 truck. \$4,500. with camper shell, 5.2L engine, club cab, 4WD, 510-537-0374 or 510-329-1513

2004 Chevy duramax 4x4 04 2500 hd duramax diesel 4x4 pw,pd,keyless entry,xm sat, 925-373-3429

2004 GMC Sierra stretch cab. \$18,000 OB. Truck is dark metallic green with XM radio, 209-814-2400

2004 Nissan Titan SE Crew Cab 4X4. \$19,000. 41,000 miles, 5.6 L V8, Big tow package, 925-516-2774

Truck hitch. \$50. Class V Receiver Hitch off a 2002 Ford F350. Weight capacity 500/5000. 209-892-5885

**VACATION RENTALS**

Kona Big Island of Hawaii vacation home. 415-377-5361

Mountain cabin. Cozy, near Arnold. 4 bedr, 2 bath home. Fully loaded kitchen. 925-321-1479

Santa Cruz beach house. 2 bedr, 2 bath, spa, fully loaded kitchen. 925-245-1114

So. Lake Tahoe vacation rental. \$650/ wk. Three blocks from Tahoe Queen & lake. (925) 556-9511

South Lake Tahoe chalet. \$Lab Rates. 3 bedroom 2 bath chalet, nicely furnished, 209-599-4644

Vacation rental. \$125. Tahoe-Donner Truckee, Ca 3bd/2bth cabin for summer rent or discounted lease. 925-858-0419

Wine country rental. \$150/night. Monte Rio - Vacation wonderland - in the heart of the Russian River Valley. 925-513-4767

**WANTED**

63-75 truck. Chevy, GMC, Ford... looking for long bed 2wd pickup 925-373-3429

Granada High Class of 1972. Classmates to attend a 35-year reunion. Saturday evening, Aug. 18, (925) 449-5308

Propane bottles. Looking for 15 to 20-pound propane bottles, BBQ-style. 925-513-4767

RETIREES’ CORNER

PEOPLE NEWS

**Gus Carlson** (Mechanical Engineering, 2000) proudly reports that Ace/Penguin has just published his son Jeff’s first novel. “Plague Year” is a high- tech thriller about the accidental release of a deadly self-replicating nanotechnology.

Interestingly, one of the front cover “blurbs” is by former LLNL employee and *New York Times* bestselling author Kevin Anderson, who calls it “a grim and fascinating new twist on the post-holocaust story.” You can find cover art and the first two chapters at Carlson’s Website, [www.jverse.com](http://www.jverse.com), along with book-signing dates in the Bay Area and advance information on the sequel, “War Day,” coming from Ace in Summer 2008.

**Gus** (Engineering Directorate, 1993) and **Jane** (Mechanical Engineering, 1993) **Olson**, along with **Jackie and Alan Mode** (NAI, 2000) and granddaughter, Brittany, recently took a

cruise — a land/sea tour in Alaska. They went to Fairbanks for one day, Denali for two days, Anchorage for three days, and a three-day cruise on Prince Williams Sound. They saw moose, bears, many species of birds and Iditarod sled teams. They also saw Mount McKinley, many glaciers, waterfalls and some of the most beautiful scenery in North America. They enjoyed the 23-hours of daylight. They attended a July 4 party with Alan’s daughter and family, although there were no fireworks since there was no darkness. (See retiree Webpage for more details.)

The **August retirees’ luncheon** will be held at noon on Wednesday, Aug. 15, at the Elks Lodge in Livermore. The speaker will be George Farquar. The title of his talk is: “Homeland Security Applications of Single Particle Aerosol Mass Spectrometry: Recent Developments at LLNL.” Farquar is currently a research scientist

in the Chemistry, Materials, and Life Sciences Directorate studying aerosol mass spectrometry for homeland security and environmental applications. He was a Glenn T. Seaborg Institute postdoctoral fellow at LLNL where he expanded the use of Bioaerosol Mass Spectrometry (BAMS) detection to include explosives, chemical warfare agents and drugs.

Gus and Jane Olson have found someone who might be interested in taking over the Retirees’ Corner, but if anyone else is interested, contact them. The only requirement is that you have a computer and e-mail. Perhaps someone who is retiring soon would enjoy this volunteer job. If you are interested, call them at 925-443-4349.

Send any input to Jane or Gus Olson. E-Mail: [AugustO@aol.com](mailto:AugustO@aol.com) or [JaneRubert@aol.com](mailto:JaneRubert@aol.com). Snail mail address: 493 Joyce Street, Livermore, CA 94550.

WHERE TO FIND TRANSITION INFORMATION ON THE WEB	
WHAT	WHERE
Biweekly payroll information	LLNL transition site, newsroom
UC Decision Guide	LLNL transition site, newsroom
Decision/activity timeline	LLNL transition site, coming events
Benefits meetings	LLNL transition site, coming events
LLNS and UC benefits meeting presentations	LLNL transition site, newsroom
Town Hall meeting presentations	LLNL transition site, key documents
Submit questions	LLNL transition site, FAQ
Accept/decline offer letter	LAPIS <a href="https://psapp.llnl.gov/psp/ps89prd/?cmd=login">https://psapp.llnl.gov/psp/ps89prd/?cmd=login</a>
LLNS hotline	LLNS, benefits
Approved compensation package summary	LLNS, benefits
LLNS benefit package briefing	LLNS, benefits
UC transition support slides	LLNS, benefits
Benefit briefing handout	LLNS, benefits
NNSA white paper on benefits	LLNS, benefits
Benefits meetings	LLNS, benefits
Sample decision form	LLNS, offer letter
Sample offer letter	LLNS, offer letter
Online acceptance procedure	LLNS, offer letter
Dispute resolution program summary	LLNS, offer letter
UC benefits information	<a href="http://atyourservice/ucop.edu">http://atyourservice/ucop.edu</a>
Benefits directory	LLNS, Q&A
Submit questions	LLNS, Q&A (benefits)
Key personnel	LLNS, About Us, leadership team
Organization chart	LLNS, About Us, leadership team

Quail for Future Farmers of America school project. 925-449-1294

Reunion. Alameda County 4H'ers for an all county reunion of leaders and members from 1955 to present. 925-371-0507

Special needs babysitter. Responsible college or high school student needed to babysit 15 year old boy with autism 2-3 afternoons a week from 3-6 p.m. Great pay. Must drive, enjoy walks, bookstores, watching videos. Call 443-3396 (evenings)

Towing drawbar. Need Class II rated (3500lbs drawbar, 1.25 inch square receiver)with minimal drop/rise. 209-892-1918

Treadmill.-Spacesaver. Looking for low priced electric fold-up/spacesaver treadmill to encourage diabetic relative to get healthy 925-518-7600

Wanted: small car. Need small automatic car for college student. 209-531-1527

Wanted: Agapanthus (Lily of the Nile). 209-403-1854

Wanted: Woman's bicycle. hybrid or mt. bike in good condition 454-0877

Needed: Toddler bed with side railings. 925-819-6018

NEWSLINE

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## SCIENCE NEWS

## Survival strategies of the California red-legged frog



An adult California red-legged frog.

PHOTO BY MICHAEL VAN HATTEM, EPD

The federally protected California red-legged frog (*Rana aurora draytonii*) can be found in streams, ponds, marshes and artificial water sources such as stock ponds. Here at the Laboratory, you might observe these crimson hued creatures at Lake Haussmann and Arroyo Las Positas, or in the wetlands of Elk Ravine and Gooseberry Canyon at Site 300.

Often these aquatic habitats available to frogs are isolated from each other by wide expanses of terrestrial habitat. These seemingly isolated frog populations are linked together to form a larger group referred to as a metapopulation.

The populations of frogs that make up the metapopulation operate independently of each other. However, during certain times of the year, some frogs will travel beyond their usual pond either to the surrounding terrestrial habitat in search of food or shelter, or to migrate to another aquatic habitat.

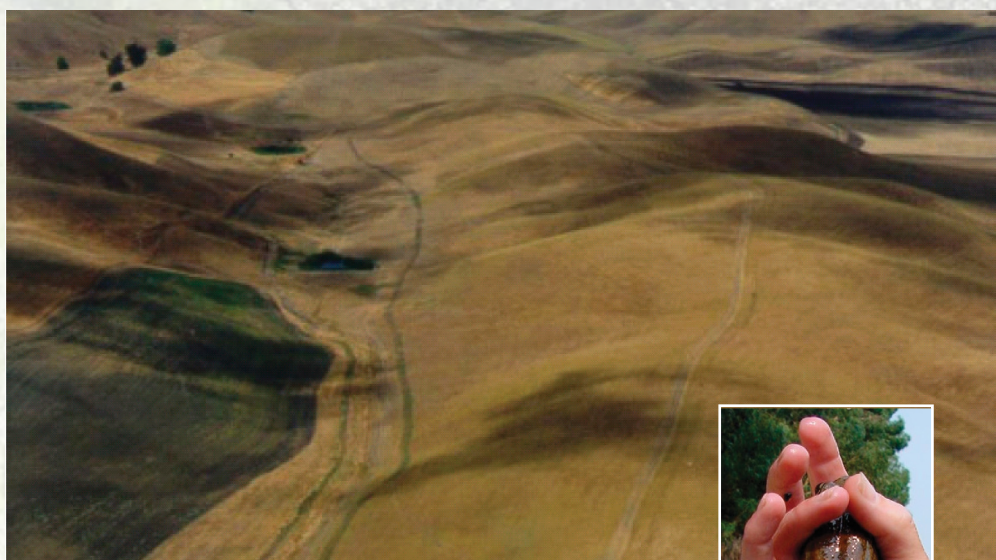
Throughout the summer months, California red-legged frogs often move into terrestrial areas to forage and seek shelter. During this period, frogs can be found under boulders or rocks and organic debris, such as downed trees or logs; industrial debris; and agricultural items like drains, troughs or sheds. Small burrows, like those made by ground squirrels, provide an important

safe haven from the intense summer heat. Moist leaf litter and narrow stream channels also allow the frogs to hunker down, waiting for the fall rains. Frogs will even use the deep cracks of drying ponds, anything that provides shade, cooler temperatures, and a bit of moisture.

During periods of wet weather, some frogs use the rain to travel overland and settle in new aquatic habitats. This usually begins with the first rains of the fall and most of these overland movements happen at night. Frogs can travel under these conditions for distances of more than 1.9 miles (3 kilometers) with no apparent regard to topography, vegetation type or riparian corridors.

Movements of individual frogs throughout the metapopulation allows for the exchange of individuals and recolonization in the event of a local extinction. Access to appropriate terrestrial habitat allows the frogs to survive throughout periods of drought and heat.

Biologists and resource managers are attempting to understand the survival strategies of the California red-legged frog. One thing is certain: the frogs, not only at LLNL's sites but throughout the region, have the greatest chance of survival when there are multiple areas of suitable aquatic habitat connected by suitable terrestrial habitat.



U.S. FISH AND WILDLIFE SERVICE.

**Above:** Aerial view of California red-legged frog breeding (aquatic) habitat surrounded by terrestrial habitat. **Inset:** An adult California red-legged frog wearing a radio-transmitter. This is a device that can help biologists study movement and habitat use within the metapopulation. **Background image:** This wetland at Elk Ravine is used by California red-legged frogs. CREDIT: COREY CATE

PHOTO BY  
MICHAEL VAN HATTAM

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